

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process for producing nitrogen trifluoride, comprising reacting fluorine gas with ammonia gas in a gaseous phase, wherein the reaction is performed at 70°C or less in the presence of a diluting gas, wherein the concentration of fluorine gas fed is 3 mol % or less and the concentration of ammonia gas fed is 6 mol % or less,
wherein at least the fluorine gas is fed in portions from two or more gas inlets and/or
the ammonia gas is fed in portions from two or more gas inlets.

2. (original): The process as claimed in claim 1, wherein the reaction temperature is 50°C or less.

3. (original): The process as claimed in claim 1 or 2, wherein the concentrations of fluorine gas and ammonia gas fed are from 1:1 to 1:2 in terms of the molar ratio.

4-6. (canceled).

7. (previously presented): The process as claimed in claim 1 or 2, wherein the diluting gas is at least one selected from the group consisting of nitrogen, helium, argon, hexafluoroethane and octafluoropropane.

8. (previously presented): The process as claimed in claim 1 or 2, wherein the diluting gas is reused by circulation.

9. (previously presented): The process as claimed in claim 1 or 2, wherein a step of treating unreacted fluorine gas is provided and in the step, unreacted fluorine gas is treated with an aqueous alkali solution and/or alumina.

10. (original): The process as claimed in claim 9, wherein the treatment step is performed at 80°C or less.

11-13. (canceled).

14. (new): The process as claimed in claim 1 or 2, wherein the ammonia gas is fed in portions from two or more gas inlets.